

We claim:

1. A gravity driven steerable wheeled vehicle comprising:
 - a chassis having a front portion, a rear portion, an underside and a top side;
 - a rider riding surface on said chassis top side configured to cause a rider on said rider riding surface to be oriented in a substantially prone, face down, face forward position;
 - means for attaching a rear axle assembly substantially at said chassis rear portion;
 - means for mounting a front axle assembly substantially at said chassis front portion;
 - means for steering said gravity driven steerable wheeled vehicle by said rider when said rider is positioned on said rider riding surface;
 - at least one but not more than two rear wheel hub and spindle assemblies integral with said rear axle assembly;
 - at least one but not more than two front wheel hub and spindle assemblies integral with said front axle assembly;
 - means for causing said vehicle to be non-moving when said vehicle is unoccupied by a rider wherein said means for causing non-movement of unoccupied vehicle is at least one movement-limiting system for causing non-movement of an unoccupied vehicle or combination of any or all movement-limiting systems selected from a group consisting of weight detection of objects occupying said rider riding surface, temperature detection of objects occupying said rider riding surface, electrical current flow detection of level of current flow within at least two skin contact points associated with said rider; and
 - activation control mechanism for activating and deactivating said means for causing said vehicle to be non-moving.
2. The gravity driven steerable wheeled vehicle according to claim 1 further comprising means for causing deceleration and halting of motion of said vehicle when said vehicle has motion and being used by a rider on said rider riding surface.
3. The gravity driven steerable wheeled vehicle according to claim 1 further comprising means for harnessing the rider onto and into said rider riding surface when said rider is positioned on said vehicle.
4. The gravity driven steerable wheeled vehicle according to claim 2 further comprising means for harnessing the rider onto and into said rider riding surface when said rider is positioned on said vehicle.
5. The gravity driven steerable wheeled vehicle according to claim 1 further comprising means for absorbing shock exerted on front wheels and tires attached to said at least one but not more than two front wheel hub and spindle assemblies thereby damping shock, caused by said

vehicle passing over rough terrain, between said front wheels and tires and said front axle assembly.

6. The gravity driven steerable wheeled vehicle according to claim 3 further comprising means for absorbing shock exerted on front wheels and tires attached to said at least one but not more than two front wheel hub and spindle assemblies thereby damping shock, caused by said vehicle passing over rough terrain, between said front wheels and tires and said front axle assembly.

7. The gravity driven steerable wheeled vehicle according to claim 4 further comprising means for absorbing shock exerted on front wheels and tires attached to said at least one but not more than two front wheel hub and spindle assemblies thereby damping shock, caused by said vehicle passing over rough terrain, between said front wheels and tires and said front axle assembly.

8. The gravity driven steerable wheeled vehicle according to claim 5 further comprising means for absorbing shock exerted on rear wheels and tires attached to said at least one but not more than two rear wheel hub and spindle assemblies thereby damping shock, caused by said vehicle passing over rough terrain, between said rear wheels and tires and said rear axle assembly.

9. The gravity driven steerable wheeled vehicle according to claim 6 further comprising means for absorbing shock exerted on rear wheels and tires attached to said at least one but not more than two rear wheel hub and spindle assemblies thereby damping shock, caused by said vehicle passing over rough terrain, between said rear wheels and tires and said rear axle assembly.

10. The gravity driven steerable wheeled vehicle according to claim 7 further comprising means for absorbing shock exerted on rear wheels and tires attached to said at least one but not more than two rear wheel hub and spindle assemblies thereby damping shock, caused by said vehicle passing over rough terrain, between said rear wheels and tires and said rear axle assembly.

11. The gravity driven steerable wheeled vehicle according to claim 1 wherein said means steering said gravity driven steerable wheeled vehicle comprises a steering system for steering said front axle assembly.

12. The gravity driven steerable wheeled vehicle according to claim 10 wherein said means steering said gravity driven steerable wheeled vehicle comprises a steering system for steering said front axle assembly.

13. The gravity driven steerable wheeled vehicle according to claim 1 wherein said means

steering said gravity driven steerable wheeled vehicle comprises a steering system for steering said rear axle assembly.

14. The gravity driven steerable wheeled vehicle according to claim 10 wherein said means steering said gravity driven steerable wheeled vehicle comprises a steering system for steering said rear axle assembly.

15. The gravity driven steerable wheeled vehicle according to claim 11 wherein said means steering said gravity driven steerable wheeled vehicle further comprises a steering system for steering said rear axle assembly.

16. The gravity driven steerable wheeled vehicle according to claim 12 wherein said means steering said gravity driven steerable wheeled vehicle comprises a steering system for steering said rear axle assembly.

17. The gravity driven steerable wheeled vehicle according to claim 11 wherein said means for causing deceleration and halting of motion of said vehicle is at least one hydraulic brake mechanism braking at least one of said at least one but not more than two front wheel hub and spindle assemblies.

18. The gravity driven steerable wheeled vehicle according to claim 16 wherein said means for causing deceleration and halting of motion of said vehicle is at least one hydraulic brake mechanism braking at least one of said at least one but not more than two front wheel hub and spindle assemblies.

19. A gravity driven steerable wheeled vehicle comprising:
 a chassis having a front portion, a rear portion, an underside and a top side;
 a rider riding surface on said chassis top side configured to cause a rider on said rider riding surface to be oriented in a prone, face down, face forward position;
 means for attaching a rear axle assembly substantially at said chassis rear portion;
 means for mounting a front axle assembly substantially at said chassis front portion;
 means for steering said gravity driven steerable wheeled vehicle by said rider when said rider is positioned on said rider riding surface;
 two rear wheel hub and spindle assemblies integral with said rear axle assembly, one rear wheel hub and spindle assembly at each end of said rear axle assembly; and
 two front wheel hub and spindle assemblies integral with said front axle assembly, one front wheel hub and spindle assembly at each end of said front axle assembly;
 means for causing said vehicle to be non-moving when said vehicle is unoccupied by a rider wherein said means for causing non-movement of unoccupied vehicle is at least one movement-

limiting system for causing non-movement of an unoccupied vehicle or combination of any or all movement-limiting systems selected from a group consisting of weight detection of objects occupying said rider riding surface, temperature detection of objects occupying said rider riding surface, electrical current flow detection of level of current flow within at least two skin contact points associated with said rider; and

activation control mechanism for activating and deactivating said means for causing said vehicle to be non-moving.

20. The gravity driven steerable wheeled vehicle according to claim 19 further comprising means for causing deceleration and halting of motion of said vehicle when said vehicle has motion. and being used by a rider on said rider riding surface.

21. The gravity driven steerable wheeled vehicle according to claim 19 further comprising means for harnessing the rider onto and into said rider riding surface when said rider is positioned on said vehicle.

22. The gravity driven steerable wheeled vehicle according to claim 20 further comprising means for harnessing the rider onto and into said rider riding surface when said rider is positioned on said vehicle.

23. The gravity driven steerable wheeled vehicle according to claim 19 further comprising means for absorbing shock exerted on each said front wheels and tires attached to said two front wheel hub and spindle assemblies thereby damping shock, caused by said vehicle passing over rough terrain, between said front wheels and tires and said front axle assembly.

24. The gravity driven steerable wheeled vehicle according to claim 21 further comprising means for absorbing shock exerted on each said front wheels and tires attached to said two front wheel hub and spindle assemblies thereby damping shock, caused by said vehicle passing over rough terrain, between said front wheels and tires and said front axle assembly.

25. The gravity driven steerable wheeled vehicle according to claim 22 further comprising means for absorbing shock exerted on each said front wheels and tires attached to said two front wheel hub and spindle assemblies thereby damping shock, caused by said vehicle passing over rough terrain, between said front wheels and tires and said front axle assembly.

26. The gravity driven steerable wheeled vehicle according to claim 25 further comprising means for absorbing shock exerted on each said rear wheels and tires attached to each said two rear wheel hub and spindle assemblies thereby damping shock caused by said vehicle passing over rough terrain, between said rear wheels and tires and said rear axle assembly.

27. A gravity driven steerable wheeled vehicle comprising:

- a chassis having a front portion, a rear portion, an underside and a top side;
- a rider riding surface on said chassis top side configured to cause a rider on said rider riding surface to be oriented in a prone, face down, face forward position;
- means for attaching a rear axle assembly substantially at said chassis rear portion;
- means for mounting a steerable front axle assembly substantially at said chassis front portion;
- means for steering said gravity driven steerable wheeled vehicle by said rider when said rider is positioned on said rider riding surface;
- two rear wheel hub and spindle assemblies integral with said rear axle assembly, one rear wheel hub and spindle assembly at each end of said rear axle assembly;
- two front wheel hub and spindle assemblies integral with said front axle assembly, one front wheel hub and spindle assembly at each end of said front axle assembly;
- means for absorbing shock exerted on each said front wheels and tires attached to each said two front wheel hub and spindle assemblies thereby damping shock caused by said vehicle passing over rough terrain, between said front wheels and tires and said front axle assembly;
- means for absorbing shock exerted on each said rear wheels and tires attached to each said two rear wheel hub and spindle assemblies thereby damping shock caused by said vehicle passing over rough terrain, between said rear wheels and tires and said rear axle assembly; and
- means for causing deceleration and halting of motion of said vehicle when said vehicle has motion;
- means for harnessing the rider onto and into said rider riding surface when said rider is positioned on said vehicle;
- means for causing said vehicle to be non-moving when said vehicle is unoccupied by a rider wherein said means for causing non-movement of unoccupied vehicle is at least one movement-limiting system for causing non-movement of an unoccupied vehicle or combination of any or all movement-limiting systems selected from a group consisting of weight detection of objects occupying said rider riding surface, temperature detection of objects occupying said rider riding surface, electrical current flow detection of level of current flow within at least two skin contact points associated with said rider; and
- activation control mechanism for activating and deactivating said means for causing said vehicle to be non-moving.

28. A gravity driven steerable vehicle comprising:

- a chassis having a front portion, a rear portion, an underside and a top side;
- a rider riding surface on said chassis top side configured to cause a rider on said rider riding surface to be oriented in a prone, face down, face forward position;
- means for attaching a rear axle assembly substantially at said chassis rear portion;

means for mounting a front axle assembly substantially at said chassis front portion;

means for steering said gravity driven steerable wheeled vehicle by said rider when said rider is positioned on said rider riding surface;

at least one but not more than two rear wheel hub and spindle assemblies integral with said rear axle assembly;

at least one but not more than two front wheel hub and spindle assemblies integral with said front axle assembly;

means for retrofitting said gravity driven steerable wheeled vehicle with at least one ski assembleable to at least one of said at least one but not more than two rear wheel hub and spindle assemblies and said at least one but not more than two front wheel hub and spindle assemblies;

means for causing said vehicle to be non-moving when said vehicle is unoccupied by a rider wherein said means for causing non-movement of unoccupied vehicle is at least one movement-limiting system for causing non-movement of an unoccupied vehicle or combination of any or all movement-limiting systems selected from a group consisting of weight detection of objects occupying said rider riding surface, temperature detection of objects occupying said rider riding surface, electrical current flow detection of level of current flow within at least two skin contact points associated with said rider; and

activation control mechanism for activating and deactivating said means for causing said vehicle to be non-moving.

29. The gravity driven steerable vehicle according to claim 28 further comprising means for causing deceleration and halting of motion of said vehicle when said vehicle has motion and being used by a rider on said rider riding surface.

30. The gravity driven steerable vehicle according to claim 28 further comprising means for harnessing the rider onto and into said rider riding surface when said rider is positioned on said vehicle.

31. The gravity driven steerable vehicle according to claim 29 further comprising means for harnessing the rider onto and into said rider riding surface when said rider is positioned on said vehicle.

32. The gravity driven steerable vehicle according to claim 28 further comprising means for absorbing shock exerted on said at least one ski attached to said at least one but not more than two front wheel hub and spindle assemblies thereby damping shock, caused by said vehicle passing over rough terrain, between said at least one ski and said front axle assembly.

33. The gravity driven steerable vehicle according to claim 30 further comprising means for absorbing shock exerted on said at least one ski attached to said at least one but not more than two front wheel hub and spindle assemblies thereby damping shock, caused by said vehicle passing

over rough terrain, between said at least one ski and said front axle assembly.

34. The gravity driven steerable vehicle according to claim 31 further comprising means for absorbing shock exerted on said at least one ski attached to said at least one but not more than two front wheel hub and spindle assemblies thereby damping shock, caused by said vehicle passing over rough terrain, between said at least one ski and said front axle assembly.

35. The gravity driven steerable vehicle according to claim 32 further comprising means for absorbing shock exerted on said at least one ski attached to said at least one but not more than two rear wheel hub and spindle assemblies thereby damping shock, caused by said vehicle passing over rough terrain, between said at least one ski and said rear axle assembly.

36. The gravity driven steerable vehicle according to claim 33 further comprising means for absorbing shock exerted on said at least one ski attached to said at least one but not more than two rear wheel hub and spindle assemblies thereby damping shock, caused by said vehicle passing over rough terrain, between said at least one ski and said rear axle assembly.

37. The gravity driven steerable vehicle according to claim 34 further comprising means for absorbing shock exerted on said at least one ski attached to said at least one but not more than two rear wheel hub and spindle assemblies thereby damping shock, caused by said vehicle passing over rough terrain, between said at least one ski and said rear axle assembly.

38. The gravity driven steerable vehicle according to claim 28 wherein said means steering said gravity driven steerable vehicle comprises a steering system for steering said front axle assembly.

39. The gravity driven steerable vehicle according to claim 37 wherein said means steering said gravity driven steerable vehicle comprises a steering system for steering said front axle assembly.

40. The gravity driven steerable vehicle according to claim 28 wherein said means steering said gravity driven steerable vehicle comprises a steering system for steering said rear axle assembly.

41. The gravity driven steerable vehicle according to claim 37 wherein said means steering said gravity driven steerable vehicle comprises a steering system for steering said rear axle assembly.

42. The gravity driven steerable vehicle according to claim 38 wherein said means steering

said gravity driven steerable vehicle further comprises a steering system for steering said rear axle assembly.

43. The gravity driven steerable vehicle according to claim 39 wherein said means steering said gravity driven steerable vehicle comprises a steering system for steering said rear axle assembly.

44. The gravity driven steerable vehicle according to claim 29 wherein said means for causing deceleration and halting of motion of said vehicle is at least one hydraulic brake mechanism braking said skis assembled to said front wheel hub and spindle assemblies.

45. The gravity driven steerable vehicle according to claim 39 wherein said means for causing deceleration and halting of motion of said vehicle is at least one hydraulic brake mechanism braking said skis assembled to said front wheel hub and spindle assemblies.

46. The gravity driven steerable vehicle according to claim 43 wherein said means for causing deceleration and halting of motion of said vehicle is at least one hydraulic brake mechanism braking said skis assembled to said front wheel hub and spindle assemblies.

47. A gravity driven steerable vehicle for use on snow covered terrain comprising:
 a chassis having a front portion, a rear portion, an underside and a top side;
 a rider riding surface on said chassis top side configured to cause a rider on said rider riding surface to be oriented in a prone, face down, face forward position;
 means for attaching a rear axle assembly substantially at said chassis rear portion;
 means for mounting a front axle assembly substantially at said chassis front portion;
 means for steering said gravity driven steerable vehicle by said rider when said rider is positioned on said rider riding surface;
 two rear hub and spindle assemblies integral with said rear axle assembly, one rear hub and spindle assembly at each end of said rear axle assembly; and
 two front hub and spindle assemblies integral with said front axle assembly, one front hub and spindle assembly at each end of said front axle assembly;
 means for attaching one ski assembleable to each of said two rear hub and spindle assemblies and said two front hub and spindle assemblies;
 means for causing said vehicle to be non-moving when said vehicle is unoccupied by a rider wherein said means for causing non-movement of unoccupied vehicle is at least one movement-limiting system for causing non-movement of an unoccupied vehicle or combination of any or all movement-limiting systems selected from a group consisting of weight detection of objects occupying said rider riding surface, temperature detection of objects occupying said rider riding surface, electrical current flow detection of level of current flow within at least two skin contact

points associated with said rider; and

activation control mechanism for activating and deactivating said means for causing said vehicle to be non-moving.

48. The gravity driven steerable vehicle for use on snow covered terrain according to claim 47 further comprising means for causing deceleration and halting of motion of said vehicle when said vehicle has motion and being used by a rider on said rider riding surface.

49. The gravity driven steerable vehicle for use on snow covered terrain according to claim 47 further comprising means for harnessing the rider onto and into said rider riding surface when said rider is positioned on said vehicle.

50. The gravity driven steerable vehicle for use on snow covered terrain according to claim 48 further comprising means for harnessing the rider onto and into said rider riding surface when said rider is positioned on said vehicle.

51. The gravity driven steerable vehicle for use on snow covered terrain according to claim 47 further comprising means for absorbing shock exerted on said ski attached to said two front hub and spindle assemblies thereby damping shock, caused by said vehicle passing over rough terrain, between said front attached skis and said front axle assembly.

52. The gravity driven steerable vehicle for use on snow covered terrain according to claim 49 further comprising means for absorbing shock exerted on said ski attached to said two front hub and spindle assemblies thereby damping shock, caused by said vehicle passing over rough terrain, between said front attached skis and said front axle assembly.

53. The gravity driven steerable vehicle for use on snow covered terrain according to claim 50 further comprising means for absorbing shock exerted on said ski attached to said two front hub and spindle assemblies thereby damping shock, caused by said vehicle passing over rough terrain, between said front attached skis and said front axle assembly.

54. The gravity driven steerable vehicle for use on snow covered terrain according to claim 53 further comprising means for absorbing shock exerted on said ski attached to each said two rear hub and spindle assemblies thereby damping shock caused by said vehicle passing over rough terrain, between said rear attached skis and said rear axle assembly.

55. The gravity driven steerable vehicle for use on snow covered terrain according to claim 47 further comprising a combination rear roll bar and transport bail for protecting the rider and for transporting said vehicle using a means for lifting.